in nearby Standard Metropolitan Statistical Areas is prohibited. In areas where SMSA's are in close proximity, careful consideration should be given to minimum power requirements and to the location, height, and radiation pattern of the transmitting antenna. Licensees and applicants are expected to cooperate fully in attempting to resolve problems of potential interference before bringing the matter to the attention of the Commission.

(b) As a condition for use of frequencies in this service each carrier is required to:

(1) Engineer the system to be reasonably compatible with adjacent channel operations in the same city; and

(2) Cooperate fully and in good faith to resolve whatever potential interference and transmission security problems may be present in adjacent channel operation.

(c) The following interference studies, as appropriate, must be included in DEMS Nodal Station applications to the extent they are provided for in this subpart:

(1) An analysis of the potential for harmful interference with other stations if the coordinates of any proposed station are located within 80 kilometers (50 miles) of the coordinates of any authorized, or previously proposed station(s) that utilizes, or would utilize, the same frequency or an adjacent potentially interfering frequency; and

(2) An analysis concerning possible adverse impact upon Canadian communications if the station's transmitting antenna is to be located within 55 kilometers (35 miles) of the Canadian border.

(d) In addition a copy of the interference analysis submitted in response to paragraph (c)(1) of this section must be served on all applicants and/or grantees concerned within 5 days of its submission to the Commission.

[61 FR 26677, May 28, 1996, as amended at 62 FR 24583, May 6, 1997]

§ 101.511 Purpose and permissible service.

(a) The DEMS is intended to provide for the exchange of digital information among and between subscribers using one or more DEMS Systems.

(b) Unless otherwise directed or conditioned in the applicable instrument of authorization, DEMS may be used to exchange any type of digital information consistent with the Commission's Rules and the applicable tariff of the carrier.

(c) The carrier's tariff must fully describe the parameters of the service to be provided, including the degree of communications security a subscriber can expect in ordinary service.

§ 101.513 Transmitter power.

The transmitter power will be governed by § 101.113. Further, each application must contain an analysis demonstrating compliance with § 101.113(a).

§ 101.515 Emissions and bandwidth.

Different types of emissions may be authorized if the applicant describes fully the modulation and bandwidth desired, and demonstrates that the bandwidth desired is no wider than needed to provide the intended service. In no event, however, may the necessary or occupied bandwidth exceed the specified channel width of the assigned pair.

§ 101.517 Antennas.

(a) Transmitting antennas may be omnidirectional or directional, consistent with coverage and interference requirements.

(b) The use of horizontal or vertical plane wave polarization, or right hand or left hand rotating elliptical polarization must be used to minimize harmful interference between stations.

(c) Directive antennas must be used at all DEMS User Stations and may be elevated no higher than necessary to assure adequate service. Antenna structures requiring FAA notification under part 17 of this chapter must be registered with the Commission. The structure owner is responsible for registering, painting, and lighting the structure if applicable. Requests for such authorization must show the inclusive dates of the proposed operation.

§ 101.519 Interconnection.

(a) All DEMS licensees must make available to the public all information necessary to allow the manufacture of user equipment that will be compatible with the licensee's network.